

### **ABSTRACT**

An unmanned airborne reconnaissance system, the unmanned airborne reconnaissance system including a lightweight, portable, powered aircraft and a foldable launch rail, the aircraft, in a broken down condition and the launch rail in a broken down condition fitable inside a box, the box capable of being carried by one man. The launch system includes an elongated launch rail with the carriage assembly, and a propulsion means for accelerating the carriage assembly from one end of the launch rail to the other. The carriage assembly releasably engages the aircraft so as to propel the aircraft from one end of the launch rail to the other. The propulsion may be by a cartridge that explodes and releases a gas through a cylinder, or by elastic cords. The aircraft is guided through the air either by a programmed onboard computer which controls the control surfaces of the aircraft and/or by remote control. The aircraft typically contains a camera for recording and transmitting images received from the ground below.